Brown Nicollet Cottonwood Water Quality Board

September 2003

Little Cottonwood River Watershed Project

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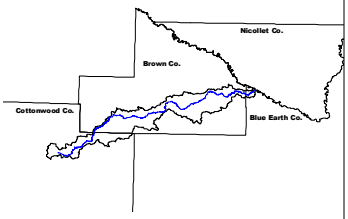


- LCR Watershed spans three counties and covers 108,000 acres.
- 75% of the watershed is located within Brown County
- 90% of the watershed landuse is under cultivation.
- Headwaters of the river start near Jeffers. The river completes its 80 mile journey to the MN River south of Courtland.

Funds Still Available to Watershed Residents

The water quality project for the watershed is nearing an end, but there are still funds available to help landowners and farmers conserve their soil and water resources. Special incentives have been added to the CRP program to help landowners install buffer strips, waterways, living snow fences, wetlands, and other CRP practices. As you get in the combine again this fall for another harvest consider those areas on your farm that may qualify for these conservation programs and give us a call to discuss your conservation options. Have a safe harvest season.

Kevin Kuehner-
Watershed Coordinator

There are still many cropped areas in the watershed like the site pictured above that are environmentally sensitive. Tremendous incentives from the watershed project and CRP programs could transform these areas from liabilities to money makers.

Using Wetlands as a Third Crop to Farm Nitrogen Out of the System

Instead of being paid to farm corn and soybeans how about raising a wetland? A new CRP program called the Farmable Wetlands Programs (FWP) now allows farmers to enroll cropped land which frequently drowns out into grass for 10-15 years. Through FWP you can enroll farmed wetlands up to five acres in size and receive annual CRP payments. A buffer around the wetland can also be enrolled in order to square off fields. Annual CRP payments average around $132/acre/year based on soil type with signing bonus. And for a limited time, you might qualify for as much as a $75/acre/year incentive payment through the Little Cottonwood River Watershed Project. This can mean up to $5,625 in addition to annual CRP payments or up to **$200/acre for marginal cropland!** See page 3 to learn more about this exciting program! If interested hurry since eligibility for the $5,625 payment is on a limited basis.

Eligible landowners will be contacted in the coming months through an air photo proposal estimating what they could receive if enrolled in the program.

20-acre area recently enrolled in the Farmable Wetlands CRP Pilot. Farmer received about $168.00 per acre for 15 years. Establishment costs were covered by the project as well.

Nutrient Management

Nitrogen Insurance- The Minnesota Department of Agriculture is helping to introduce a new federal pilot program that will help farmers and the environment by taking the financial risk out of adopting nutrient Best Management Practices.

The program is designed to help producers protect water quality by encouraging them to put their faith in nutrient application rates recommended by the University of MN. The U of M recommends application rates that can help farmers maximize yields while cutting production costs and protecting water quality. The USDA based program will be piloted in Minnesota, Iowa, Wisconsin and Pennsylvania. The program says participating farmers who apply at recommended rates and as a result suffer yield losses of 5% or more will be eligible for reimbursement though the BMP insurance. The Little Cottonwood Watershed Project is helping to cost share the insurance policies on a trial basis.

Nutrient Management Plans and Record Keeping- Now more than ever nutrient management plans and proper record keeping systems are becoming a necessity due to new state 7020 feedlot rule requirements and conservation and subsidy provisions of the new Federal Farm Bill. The MN Extension Service has created a tool to help with these requirements. Nutrient Management Planner for MN is a Microsoft Access program designed to assist in developing field specific crop nutrient management plans. A crop nutrient management plan is comprised of several components that will provide guidance, for making decisions on location, rate, timing, form, and method of nutrient application. Today manure management plans are recommended for all livestock producers but are mandatory for producers with 300 animal units or more. By 2005, all livestock producers will be required to comply with a manure management plan. The watershed project is offering free soil and manure tests and technical help through area Coops and private agronomists on a limited basis in an effort to develop nutrient management plans for interested producers. Contact the watershed project for more information.

> "Results indicate that between 90-120 pounds of nitrogen maximized yields and profits on the participating demonstration fields."

Which Rate is the Right Rate?

N-Rate Validation Results- Over 30 farms in South Central MN participated in on-farm demonstration plots to determine economical optimum nitrogen rates. Five N-rates between 60-180 lbs/acre were applied in strips to 50 acre fields to determine which N-rate resulted in the economic optimum. Results indicate that between 90-120 pounds of nitrogen maximized yields and profits in a corn soybean rotation.

If you have a yield monitor and are interested in participating for 2004, contact the watershed project for more information. In addition to a wealth of important crop management information received from the demonstrations, farmers are compensated $750 for participating.

General Plot Requirements

- Corn following soybeans
- No manure for 2 years
- GPS yield monitor
- Single hybrid planted across the site
- N rates of 0, 60, 90, 120, 150, 180
  10 acres for each rate
- N from DAP is credited

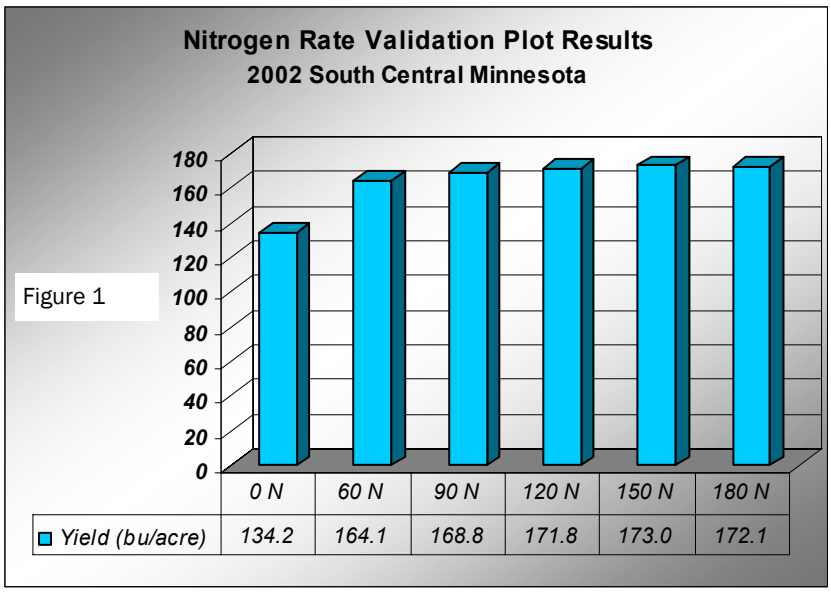


Figure 1

Without any commercial N fertilizer, yields averaged 134 bu/acre. After 120 pounds of N, yields showed little or no response to nitrogen.

Continued on page 4

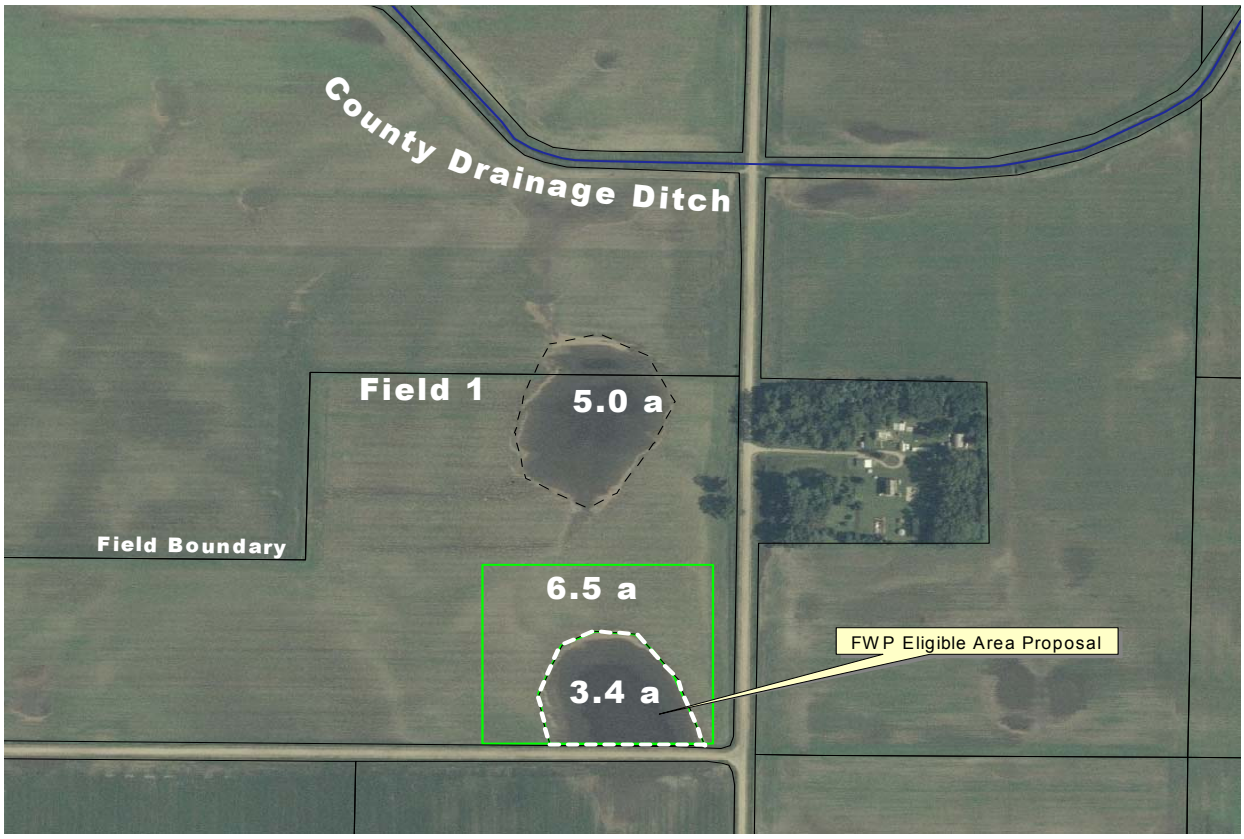
Farmable Wetland Program

Continous Signup CRP

ATTENTION LANDOWNERS IN THE LITTLE COTTONWOOD WATERSHED!

Are you tired of trying to farm drowned out areas in your fields? Now there is a great program for you. For a limited time you may be eligible for a **$5,625.00** bonus payment incentive on top of CRP payments through the watershed project!

Call 507-934-4140 For More Information or Contact Greg Tennant of NRCS



Example:

3.4 acre cropped wetland area + 6.5 acre area buffer to square off field= Total area =9.9 acres
+ Continuous Signup CRP Rate = $127.12/acre/year
+ Signing Bonus ($140-$150 acre) = $1,485
+ Little Cottonwood Incentive (paid up front) ($75/acre/year for 15 years)* = $5,625
= Total Payment over 15 years = **$25,987.32 or $175.00/acre**

NOTE:—After the 15 year contract expires the landowner has the option to continue cropping the area or re-enroll

*Incentive payment up to 5 acres

Brown Nicollet Cottonwood
Water Quality Board

Water Quality Board

Little Cottonwood River Project
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The BNC Water Quality Board is a multi-county alliance, which collaborates with public and private organizations and institutions that share an interest and commitment toward the long-term protection and improvement of water quality. The board has a long history of supporting and protecting rural watersheds, river corridors, and source water protection through voluntary cost-share assistance programs. The Board educates watershed residents, farmers, and children and improves river and watershed management policy. The joint powers board also cooperates with other federal, state and local agency officials, researchers, industry and business representatives, and university personnel.

WHICH RATE IS THE RIGHT RATE?

Continued from page 2

RESULTS

- On average even with 0 applied N, over 130 bu./acre of corn was produced.
- 32 South Central MN farmers participated in 2002. Results showed higher than average yields in 2002.
- Corn yields of 175 bu./ac were typical in fertilized strips. Corn yields of 137 bu./ac were typical in un-fertilized strips
- Results validate UM Extension Recommendations of 120 lbs./acre will produce 150 to 175 bushel corn.
- On average, the maximum profit occurred with nitrogen application of **105 lb./ac of N**
- 85% of the farms studied needed less than 140 lb./acre of nitrogen
- If farmers are applying 150 lb/ac N (average amt. applied) this study shows rates can be safely reduced by 10-30 lb/ac without risking loss of profit
- The optimum N rate to apply is very sensitive to the price of nitrogen fertilizer. For every $0.10/lb increase in N price, the optimum rate of N to apply decreases about 10 lb/ac
- Largely in part to natural gas prices, increases in the price of nitrogen fertilizer are expected in the future
- Assuming some producers are over applying N by 30 lbs./acre., an estimated 750 tons of N would have the potential of being leached away in the watershed through the tile lines and into the river or groundwater every year. If the rate was cut back from 150 lbs./acre to 120 lbs./acre, producers could save an average of $6-$10/acre or more on their fertilizer costs.

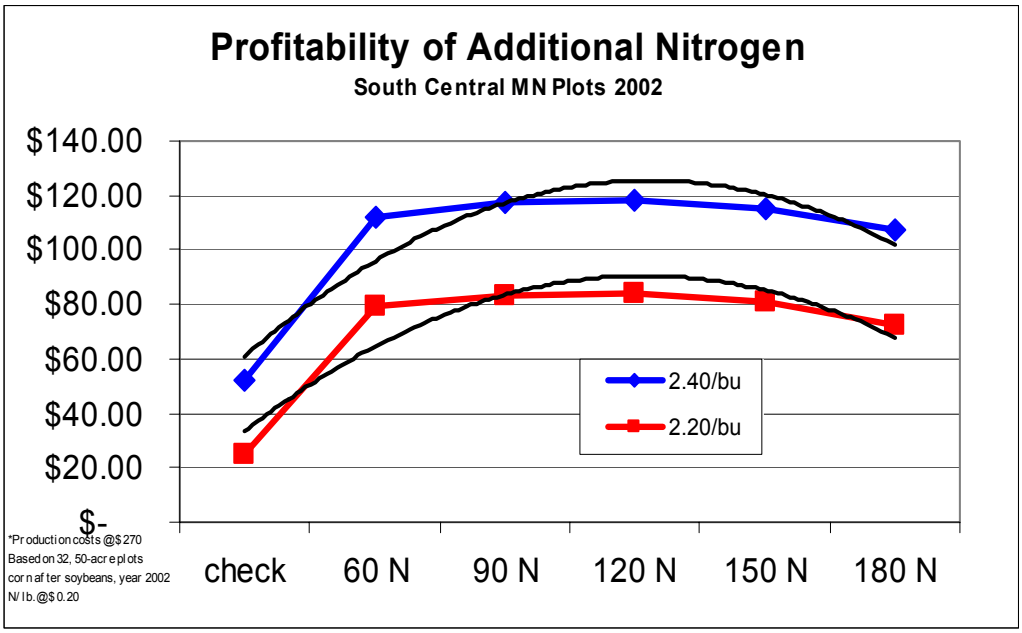

Figure 2 Nitrogen rate demonstration results show that between 90-120 lbs. of nitrogen acre maximized profits for corn farmers.